

TO: Distribution
FROM: Kent Wall
DATE: May 19, 1978
SUBJECT: Sales Meeting and CES - June 7-15
R E V I S E D S C H E D U L E

This is to outline a revised schedule for both the sales meeting and the Consumer Electronics Show (CES) in Chicago. These revisions reflect changes in our handling of our video presentation. I have included a list of as many of the coordinating details as can be defined at this time. Please review the attached as it affects your specific area of responsibility and get back to me with any questions/problems. Disregard your previous copy dated May 10, 1978.

Information on hotel accommodations, etc. will be coordinated directly by Sylvia Meza (Ext. 1852).

SKW:slm

Distribution:

A. Adler
D. Bogart
A. Carlson
D. Chandler
R. Chang
H. Cohen
J. Dickerman
J. Kingsbury
E. Krakauer
M. Kuhn
F. Murnane
S. Platt
H. Reekie
J. Rochlis
J. Rubenstein
P. Towne
S. Verduzco

cc: Steve Goldstein
Jeff Heimbuck
Gus Lizzi
Missy Powell

REVISED

OUTLINE / SCHEDULE
SALES MEETING AND CES 1978

ATE	TIME	ACTIVITY	LOCATION	EQUIPMENT/RESPONSIBILITY
/6	9:00 A.M.	Booth Set Up	McCormick Place 23rd and The Lake Chicago, Illinois	All booth materials, carpet, furniture, etc. are the responsibility of DGC.
			Lobby Level Booth #2055	Other requirements include: * * *
			Palmer House State & Monroe Streets Chicago, Illinois	- Cassette Tape of Video Commercial • • • • • O&M* - 2 Cassette Tapes ("Football" and "Basketball" commercials/Space Alert Footage) • • O&M* - Mounted Pinball Print Ad • • • O&M* - Two 16mm Prints ("Football" and "Basketball" commercials/Space Alert Footage) • • O&M* - 200 Salesmen's Briefcases • • • DGC*
5/7	9:00 A.M.	Booth Set Up Continues		
5/8	9:00 A.M.	Booth Set Up Continues		Mattel personnel and equipment arrive through- 160 East Pearson St. out the day. At Water Tower Place Chicago, Illinois
6/9	9:00 A.M.	Booth Set Up Continues		Mattel Personnel and RS Personnel arrive throughout the day.

* Items stored in Mattel's suite at the Ritz-Carlton Hotel until 6/10.

ACTIVITY	TIME	LOCATION	EQUIPMENT/RESPONSIBILITY
Equipment arrives throughout the day.	9:00 A.M.	Mattel's Suite at the Ritz-Carlton Hotel	Three (3) Las Vegas Pinball Machines (Jim Kingsbury) <ul style="list-style-type: none"> - One with arcade graphics set up and working in the suite - One with arcade graphics and one with woodgrain finish stored in the suite.
			Video System Emulator (David Chandler) <ul style="list-style-type: none"> - Set up and working in the suite
			Two (2) Decorated Video Consoles (David Chandler and Shel Platt) <ul style="list-style-type: none"> - Stored in the suite
			Six (6) Cassettes and Six (6) Cassette Packages (Shel Platt and Allen Adler) <ul style="list-style-type: none"> - One unit for each cartridge theme decorated and with copy in suite - Two demo instruciton/ play books
			One (1) Video Console Package (Shel Platt) <ul style="list-style-type: none"> - One unit decorated front and back if possible and stored in the suite
			One (1) Video System In-Store Demo Unit (Lesjay Company) <ul style="list-style-type: none"> - One prototype unit set up in the suite
			One (1) Pinball Owner's Manual (Allen Adler) <ul style="list-style-type: none"> - One comp in suite

DATE	TIME	ACTIVITY	LOCATION	EQUIPMENT/RESPONSIBILITY
/9	9:00 A.M.	Equipment arrives throughout the day.		One (1) Lady Luck Display (Lesjay Company) - One prototype unit in suite
				500 Pinball Warranty Statements (John Dickerman) - Stored in the suite
				500 Lists of GE Service Centers (John Dickerman) - Stored in the suite
				500 Pinball Press Kits (Joel Rubenstein) - Stored in the suite
				500 Hand-Held Press Kits (Joel Rubenstein) - Stored in the suite
				50 Demonstrator Scripts for each Hand-Held Game (Sylvia Meza) - Stored in the suite
				Six (6) Hand-Held Counter Demo Units (Denny Bogart) - Stored in the suite
				12 Units Each Hand-Held Game with Packages (Denny Bogart and Shel Platt) - Stored in the suite

DATE	TIME	ACTIVITY	LOCATION	EQUIPMENT/RESPONSIBILITY
1/9	9:00 A.M.	Equipment arrives through-out the day.		10,000 Hand-Held Game Brochures (Denny Bogart and Sylvia Meza) - Stored in the suite
				3,000 Pinball Brochures (Denny Bogart and Sylvia Meza) - Stored in the suite - Collated to include Warranty Statement, Lady Luck Flyer, Advertising Schedule and Ad Print
				TV Set and Video Playback Equipment (Denny Bogart--rent in Chicago) - Set up in the suite
				DGC Continues Booth Set Up
			McCormick Place	
	9:00 A.M.	Booth Set Up Continues		
	1:00 P.M. to 4:00 P.M.	RS Training	Mattel's Suite at the Ritz-Carlton Hotel	Kent Wall, Sharon Verduco, and Mal Kuhn will train RS personnel on <u>Pinball</u> and Hand-Held Games.
1/10	9:00 A.M.	Set Up for Sales Meeting	Ritz-Carlton Meeting Rm.	Denny Bogart, Kent Wall, Mal Kuhn, David Chandler, and Jim Kingsbury will move the following equipment from the suite to the meeting room: - Three Las Vegas Pinball Machines - Hand-Held Games with Packages - Three hand-held game counter demo units - Video tape playback equipment for TV commercials as back up to film system.

DATE	TIME	ACTIVITY	LOCATION	EQUIPMENT/RESPONSIBILITY
/10	9:00 A.M.	Set Up for Sales Meeting	Ritz-Carlton Meeting Room	<ul style="list-style-type: none"> - *16mm film of "Football" and "Basketball" commercials, also Space Alert footage. - Lady Luck Display Prototype - 200 Salesmen's Brochures for Pinball and Hand-Held Games - 200 Salesmen's Briefcases
				<ul style="list-style-type: none"> * Sharon Verduzco will arrange for a 16mm sound projector, 35mm slide carousel unit and a large screen for the Sales Meeting. All price lists, etc. will be the responsibility of Sharon Verduzco and Mal Kuhn.
/10	1:00 P.M.	Sales Meeting Begins	Ritz-Carlton Meeting Room	<p>Attendance by all sales reps plus Ed Krakauer, Mal Kuhn, Kent Wall, Frank Murnane, Jeff Rochlis, Sharon Verduzco, David Chandler or Rick Timmons, and Jim Kingsbury.</p> <p>At the conclusion of the Sales Meeting the following items will be moved to the McCormick Place booth by Denny Bogart, Jim Kingsbury, and David Chandler:</p> <ul style="list-style-type: none"> - All Pinball Machines - All Hand-Held Games and Packages except for one set which stays in the suite - All counter demo units for hand-held games except for one which stays in the suite - Lady Luck Display - Pinball and Hand-Held press releases except for 10 which remain in the suite - All Salesmen's brochures for Pinball and Hand-Held except for 100 which remain in the suite - All Price lists and order forms - Pinball Print Ad - Brochures of GE Service Center Listings
/10	4:00 P.M.	Sales Meeting Ends		

DATE	TIME	ACTIVITY	LOCATION		EQUIPMENT/RESPONSIBILITY
			LOCATION		
/10	4:00 P.M.	Sales Meeting Ends			- Pinball Warranty Statements - Pinball Owner's Manual - Cassette of "Football" and "Basketball" - commercials and Space Alert footage.
/10	4:05 P.M.	Cocktail Party for Reps	Ritz-Carlton Meeting Room		
/11	9:00 A.M.	CES Begins	McCormick Place		Booth manned by Kent Wall, Sharon Verduco, Mal Kuhn and five RS personnel.
/14	6:00 P.M.	CES Ends			
/15					All equipment is packed and returned to Hawthorne or New York.

Colors limited to 8, with possibility of different (fixed) luminance for background. (miss 16 colors?)

can background be scrolled? no

Can background colors be changed during frame yls
(to generate different colored Horizontal Bands, for instance)

can object data (including duplicate location) be
changed during frame? yes

2 PIV's could cover field @ 4x4 granularity

4 " " " " 2x2 "

8 " " " " 1x1 "

3 PIV's could:

Write ~~12~~¹² characters in a row (if no other objects there)

Have ~~12~~¹² single block (+~~6~~⁶ double block) objects on same row

X, Y mirroring? no

Can duplicate be made to start on line immediately following
first display of object. yrs

Wdt detects on blocks or object contact? — object to any portion
of background

— signal present on block or object spots?

$$R_0 R_1 R_2 R_3 \quad R_4 R_5 R_6 R_7 \quad R_{10} R_{11} R_{12} R_{13} \quad R_{14} R_{15} R_{16} R_{17}$$

Given to RT
All #'s in
OCTAL

init 377 361 017 171700

init

377

40 41 41 0 0 0 0

36, 017

171700

START whistle

377

17 17 17

370

STOP Whistle

377

START CROWD

377

$$15 \overset{3}{\cancel{7}} \quad 3 \overset{3}{\cancel{7}} \overset{3}{\cancel{7}}$$

307

STOP CROWD

0

Dec	Hex
0	00
1	01
2	0
3	0
4	0
5	0
6	0
7	40
8	FF
9	1B
10	0E
11	0F
12	0F
13	F0
14	00
15	00

Whistle

8 = F8

Row D

8 = DF

OSC FREQ = 1790000
NOTE OCT FREQ REGISTER

C	1	32.7000	6	5	3	5
C#	1	34.6500	6	2	3	4
D	1	36.7100	5	7	4	7
D#	1	38.8900	5	4	7	4
E	1	41.2000	5	2	3	3
F	1	43.6500	5	0	0	3
F#	1	46.2500	4	5	6	2
G	1	49.4000	3	5	3	
G#	1	51.9100	4	1	5	3
A	1	55.5500	3	7	6	2
A#	1	58.2700	3	5	7	7
B	1	61.7400	3	4	2	4
C	2	65.4000	3	2	5	6
C#	2	69.3000	3	1	1	6
D	2	73.4200	2	7	6	3
D#	2	77.7800	2	6	3	6
E	2	82.4000	2	5	1	5
F	2	87.3000	2	4	0	1
F#	2	92.5000	2	2	7	1
G	2	98.2000	1	6	5	
G#	2	103.820	2	0	6	5
A	2	110.500	1	7	7	1
A#	2	116.540	1	6	7	7
B	2	123.480	1	6	1	2
C	3	130.800	1	5	2	7
C#	3	138.600	1	4	4	7
D	3	146.840	1	3	7	1
D#	3	155.560	1	3	1	7
E	3	164.800	1	2	4	6
F	3	174.600	1	2	0	0
F#	3	185.000	1	1	3	4
G	3	196.000	1	0	7	2
G#	3	207.640	1	0	3	2
A	3	220.000	0	7	7	4
A#	3	233.080	0	7	3	7
B	3	246.960	0	7	0	5
C	4	261.600	0	6	5	3
C#	4	277.200	0	6	2	3
D	4	293.680	0	5	7	4
D#	4	311.120	0	5	4	7
E	4	329.600	0	5	2	3
F	4	349.200	0	5	0	0
F#	4	370.000	0	4	5	6
G	4	392.000	0	4	3	5
G#	4	415.280	0	4	1	5
A	4	440.000	0	3	7	6
A#	4	466.160	0	3	5	7
B	4	493.920	0	3	4	2
C	5	523.200	0	3	2	5
C#	5	554.400	0	3	1	1
D	5	587.360	0	2	7	6
D#	5	622.240	0	2	6	3
E	5	659.200	0	2	5	1
F	5	698.400	0	2	4	0
F#	5	740.000	0	2	2	7
G	5	784.000	0	2	1	6
G#	5	830.560	0	2	0	6

A 5 880 0 1 7 7
A# 5 932.320 0 1 6 7
B 5 987.840 0 1 6 1

410 HALT

		C F	COARSE	FINE
C	6 5 3 5	D 5 D	1 5	1 3 5
	6 2 3 4	C 9 C	1 4	2 3 4
D	5 7 4 7	B E 7	1 3	3 4 7
	5 4 7 4	B 3 C	1 3	0 6 7
E	5 2 3 3	A 9 6	1 2	2 2 6
F	5 0 0 3	A 0 3	1 2	0 0 3
	4 5 6 2	9 7 2	1 1	1 6 2
G	4 3 5 3	8 E B	1 0	3 5 3
	4 1 5 3	8 6 B	1 0	1 5 3
A	3 7 6 2	7 F 2	7	3 6 2
	3 5 7 7	7 7 F	7	1 7 7
B	3 4 2 4	7 1 4	7	0 2 4
C	3 2 5 6	6 A E	6	2 5 6
	3 1 1 6	6 4 E	6	1 1 6
D	2 7 6 3	5 F 3	5	3 6 3
	2 6 3 6	5 9 E	5	2 3 6
E	2 5 1 5	5 4 D	5	1 1 5
F	2 4 0 1	5 0 1	5	0 0 1
	2 2 7 1	4 B 9	4	2 7 1
G	2 1 6 5	4 7 5	4	1 6 5
	2 0 6 5	4 3 5	4	0 6 5
A	1 7 7 1	3 F 9	3	3 7 1
	1 6 7 7	3 B F	3	2 7 7
B	1 6 1 2	3 8 A	3	2 1 2
C	1 5 2 7	3 5 7	3	1 2 7
	1 4 4 7	3 2 7	3	0 4 7
D	1 3 7 1	2 F 9	2	3 7 1
	1 3 1 7	2 C F	2	3 1 7
E	1 2 4 6	2 A 6	2	2 4 6
F	1 2 0 0	2 8 0	2	2 0 0
	1 1 3 4	2 5 C	2	1 3 4
G	1 0 7 2	2 3 A	2	0 7 2
	1 0 3 2	2 1 A	2	0 3 2
A	0 7 7 4	1 F C	1	3 7 4
	0 7 3 7	1 D F	1	3 3 7
B	0 7 0 5	1 C 5	1	3 0 5

		C F	COARSE	FINE
C	0 6 5 3	1 A 6	1	2 4 6
	0 6 2 3	1 9 3	1	2 2 3
D	0 5 7 4	1 7 C	1	1 7 4
	0 5 4 7	1 6 7	1	1 4 7
E	0 5 2 3	1 5 3	1	1 2 3
F	0 5 0 0	1 4 0	1	1 0 0
	0 4 5 6	1 2 E	1	0 5 6
G	0 4 3 5	1 1 D	1	0 3 5
	0 4 1 5	1 0 D	1	0 1 5
A	0 3 7 6	0 F E	0	3 7 6
	0 3 5 7	0 E F	0	3 5 7
B	0 3 4 2	0 E 2	0	3 4 2
C	0 3 2 5	0 D 5	0	3 2 5
	0 3 1 1	0 C 9	0	3 1 1
D	0 2 7 6	0 B E	0	2 7 6
	0 2 6 3	0 B 3	0	2 6 3
E	0 2 5 1	0 A 9	0	2 5 1
F	0 2 4 0	0 A 0	0	2 4 0
	0 2 2 7	0 9 7	0	2 2 7
G	0 2 1 6	0 8 E	0	2 1 6
	0 2 0 6	0 8 6	0	2 0 6
A	0 1 7 7	0 7 F	0	1 7 7
	0 1 6 7	0 7 7	0	1 6 7
B	0 1 6 1	0 7 1	0	1 6 1



S. K. WALL

Dave Chandler
MS 316

TO: Jenny Report
~~Dave Chandler~~

Re: CES Schedule

Video Presentation including packaging
etc will need to be set
up in the Ritz-Carlton
Swiss for a presentation
to WMEPS at 9AM on

June 9.

Please adjust your plans
accordingly -

cc

M. Kuhn

5/25

D Chandler M.S. 316

TO: Distribution
FROM: Sylvia Meza
DATE: May 31, 1978
SUBJECT: CES Hotel Accommodations

I have made your CES hotel reservations according to the information you or your secretary furnished to me at the Palmer House. I will forward confirmations slips as soon as they arrive.

<u>N A M E</u>	<u>C H E C K</u>	<u>I N</u>	<u>C H E C K</u>	<u>O U T</u>
Denny Bogart	June 6		June 15	
Denis Bosley	June 11		June 14	
David Chandler	June 6		June 15	
Richard Chang	June 12		June 14	
Howard Cohen	June 9		June 12	
Gary Cummings	June 6		June 15	
Jim Kingsbury	June 9		June 12	
Frank Murnane	June 7		June 15	
Rick Timmons	June 9		June 12	
Sharon Verduzco	June 7		June 15	

If there should be any changes to the above, it will be your responsibility to contact the Palmer House at (312)726-7500. You should plan to pay all expenses including room costs as incurred.

If you have any questions, please call me on Ext. 1852.

Distribution: D. Bogart H. Cohen
D. Bosley G. Cummings
D. Chandler J. Kingsbury
R. Chang F. Murnane
 S. Verduzco

cc: Kent Wall

EXHIBIT B

I. SCOPE

This specification applies to those portions of the Mattel system for which General Instrument (GI) has design and development responsibilities as outlined in this Agreement. The portions involved are essentially contained on the three printed circuit boards. They are the logic board, the power supply board, and the cartridge board. In addition, the requirements for test procedures are specified.

II. FUNCTIONAL CHARACTERISTICS, PCB'S

The Mattel product shall consist of three printed circuit boards.

- i. Logic Board. This circuit shall contain the 8900 chip set, which is a standard product of GI, configured as follows:

1. 2K x 8 bits graphics ROM.
2. 512 x 8 bits graphics RAM.
3. 2K x 10 bits program ROM.
4. 128 x 8 bits additional scratchpad RAM.

The circuit shall also contain any components necessary to insure that the 8900 chip set functions as GI has specified in the appropriate data sheets.

In addition, the audio and video shall be modulated using an ASTEC 1285-1 module.

- ii. Power Supply. This circuit shall contain components necessary to convert the low voltage AC supplied by the Mattel specified transformer to the DC power required by the Mattel product.
- iii. Cartridge Board. This shall consist of two AY-3-9500 Program ROMs.

III. PHYSICAL CHARACTERISTICS, PCB'S

The physical constraints imposed on the various printed circuit boards are defined by the design of the console housing and the cartridge housing as represented by Mattel's drawings numbered 2609-2109, 2609-2149, 2609-2119, 2610-9529, which are hereby included in this specification by reference. Mattel drawings Layout (2609) and Layout P.C.B. (2609) and sketches of the cartridge and power supply boards are also available to clarify these constraints.

1. LOGIC BOARD

The logic board contains all the 8900 system circuitry as described in Section III above except the cartridge ROM(s) and the power supply. It is a two-sided board with plated through holes, which is mounted with the components side down. The functional interfaces with this board are:

A. Cartridge (I/O) -- 22 position edge connector, Methode part number 186-413-00, into which the cartridge PC board plugs. The logic PC board should undercut this connector by about 0.060" on the three sides other than the lead side in order to provide an effective ~~chamber to~~ Chamfer to help guide the cartridge housing around the connector and tongue of the logic board.

The 22 contacts farthest away from the logic board are used to interface the program ROMs. The signals on these contacts are DB0-DB15, 3 control lines, ground and two +5 volt lines. The +5 volt lines are the outermost lines and are used to connect power back to the logic board.

There are 11 contacts on the other side of this connector. The following signals are to be put on these contacts for future use: MCLR, ~~Ø1~~, TCI, Interrupt In, Interrupt Out, and Sound In. In addition, it would be desirable to bring the five Branch External lines from the CPU to this connector.

B. Controllers (Input) -- Two 9 pin connectors (right angle header 0.025" square pins on 0.100" centers). See layout P.C.B. drawings for desired location. On each connector, pin 1 is ground, pins 2-9 are 8-bit input character going to sound-I/O IC. Pin 2 is least significant bit. Controllers are 8 switches to the ground line with a maximum of 100 ohms series resistance per switch.

C. Power (Input) -- 5 pin connector (right angle header, 0.045" square pins on 0.156 centers). See layout P.C.B. drawing for desired location. Pin designation left up to GI.

D. Antenna Cable (Output) -- Phono socket on modulator. RF signal suitable for driving all properly operating T.V.'s through antenna cable and switch.

E. Channel Select (Input) -- Slide switch mounted on PC board.

F. Reset Switch (Input) -- Momentary, normally open contacts. These parts must be attached to circuitry side of P.C. board and may require special holes.

EXHIBIT B

Page 3.

2. POWER SUPPLY BOARD

The power supply board is a single sided PC board which is mounted with the components side up. The length of the power supply board can be extended beyond that shown on the referenced drawings if the logic board is not made the maximum length. Note that enough space must be left between the two boards for controller connector access.

The power input to the power supply board comes from the transformer through a 5-pin connector (straight pin header, 0.045" square pins, 0.156" centers). One winding of the transformer provides a center-trapped 15.4 volt, rms, input to the power supply board capable of supplying 1.0 ampere average d.c. current with center-tapped rectification into a 10,000 microfarad capacitor. The other winding provides a 14.0 volt, rms, input capable of supplying 0.160 ampere average d.c. current with bridge rectification into a 1,000 microfarad capacitor. These voltages are at an input voltage of 115 volts, rms. The input voltage range for satisfactory operation is 105 to 130 volts, rms.

The power on-off switch operates on the secondary a.c. voltages. A three pole, single throw switch for this purpose is connected to the power supply board by a six-wire cable which is soldered into the power supply board. The output power from the power supply is connected to the logic board through a 5-wire cable soldered into the power supply board.

3. CARTRIDGE PRINTED CIRCUIT BOARD

The printed circuit board in the cartridge is a single sided board with edge fingers to mate with the bottom row of contacts in the 22 position connector on the logic board. It is designed to mount either one or two 28 pin ROMs. The circuit connections are those described in Section 5A above.

IV. TEST PROCEDURES

Test procedures should be specified such that the following test stations may be designed:

1. Incoming material inspection - a go/no go test on the 8900 chip set supplied by GI.
2. Final test - a cartridge program that performs a go/no go test on the completed game.

Submitted by

Dr. David P. Chandler
Mattel, Inc.